

(12)



(11) **EP 1 895 281 A3**

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **21.10.2009 Bulletin 2009/43**

(51) Int Cl.: **G01G 19/44** (2006.01)

(43) Date of publication A2: 05.03.2008 Bulletin 2008/10

(21) Application number: 07015972.8

(22) Date of filing: 14.08.2007

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated Extension States:

AL BA HR MK RS

(30) Priority: 29.08.2006 JP 2006231727

(71) Applicant: TANITA CORPORATION Tokyo 174-8630 (JP)

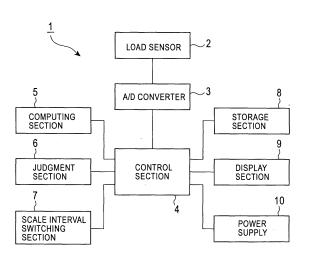
(72) Inventor: Sakai, Yoshio Itabashi-ku Tokyo 174-8630 (JP)

(74) Representative: Müller-Boré & Partner Patentanwälte Grafinger Strasse 2 81671 München (DE)

(54) Digital Scale

A scale is provided that switches a scale interval according to the degree of variation of sampled data and acquires a highly reliable weight value based on the switched scale interval. The scale is a digital scale which computes a weight value based on a predetermined scale interval, comprising data acquiring means, computation means, storage means, judging means, and scale interval switching means, wherein the data acquiring means acquires digital data of a load continuously, the computation means computes a predetermined number or a fluctuation range in a predetermined time of the acquired digital data, the storage means stores scale intervals set at multiple levels and allowable ranges of the fluctuation range that correspond to the scale intervals, the judging means determines the degree of variation of the digital data by comparing the computed fluctuation range with the allowable range of the fluctuation range which is stored for each scale interval, and the scale interval switching means switches the scale interval based on the determined degree of variation. Thus, the digital scale obviates need for a complicated and expensive filter associated with data processing and makes it possible to acquire a highly reliable weight value in a short measurement time. In particular, since the scale computes a body weight value based on a scale interval corresponding to the body motion of a subject in measurement of body weight, it requires no control of posture over a long period of time, can avoid a measurement error that the body weight value cannot be computed and is easy to

FIG. 1





EUROPEAN SEARCH REPORT

Application Number

EP 07 01 5972

Category	Citation of document with in	ndication, where appropriate,	Relevant	CLASSIFICATION OF THE	
ategory	of relevant passa	ages	to claim	APPLICATION (IPC)	
X	JP 59 072027 A (SHI 23 April 1984 (1984 * abstract *	MADZU CORP) -04-23)	1-3	INV. G01G19/44	
X	JP 59 010818 A (KUB 20 January 1984 (19 * abstract *	OTA LTD) 84-01-20)	1-3		
				TECHNICAL FIELDS SEARCHED (IPC)	
	The present search report has b	peen drawn up for all claims			
	Place of search	Date of completion of the search	<u> </u>	Examiner	
		7 September 2009	Duc		
The Hague CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure		T : theory or principle E : earlier patent doc after the filing dat D : document cited in L : document cited fo	September 2009 Pugno, Roberto T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filling date D: document cited in the application L: document oited for other reasons 8: member of the same patent family, corresponding		

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 07 01 5972

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07-09-2009

cit	Patent document cited in search report		Publication date	Patent family member(s)		Publication date
JP	59072027	A	23-04-1984	JP JP	1635659 C 2059413 B	20-01-19 12-12-19
JP	59010818	Α	20-01-1984	JP JP	1501303 C 63051490 B	28-06-19 14-10-19
			fficial Journal of the Euro			